UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

McGuireWoods

1750 Tysons Boulevard McLean, VA 22102-4215

Suite 1800

08/26/2004

08/26/2004

EXAMINER

HO, TAN

ART UNIT PAPER NUMBER

2821

2021

DATE MAILED: 08/26/2004

1	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
•	10/612 093	07/03/2003	Jung Bin Bae	07720011US	5813

TITLE OF INVENTION: MULTI-BAND HELICAL ANTENNA

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	11/26/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

			or <u>Fax</u>	<u>k</u> (703) 746-4000			
INSTRUCTIONS: This for appropriate. All further con indicated unless corrected by maintenance fee notification	m should be used for tran respondence including the legion or directed otherwise is.	smitting the ISSU Patent, advance or in Block 1, by (a	JE FEE and PUI ders and notifica a) specifying a ne	BLICATION FEE (if requition of maintenance fees we correspondence address	ired). Blocks 1 through 5 s vill be mailed to the current and/or (b) indicating a sep	should be completed where correspondence address as arate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) 7590 08/26/2004 McGuireWoods Suite 1800 1750 Tysons Boulevard McLean, VA 22102-4215				Note: A certificate of mailing can only be used for domestic mailings of Fee(s) Transmittal. This certificate cannot be used for any other accompan papers. Each additional paper, such as an assignment or formal drawing, in have its own certificate of mailing or transmission.			
				Ce	Certificate of Mailing or Transmission that this Fee(s) Transmittal is being deposited with the revice with sufficient postage for first class mail in an one Mail Stop ISSUE FEE address above, or being the USPTO (703) 746-4000, on the date indicated below		
, ,						(Depositor's name)	
			,			(Signature)	
						(Date)	
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но,	TAN	2821		343-895000			
1. Change of correspondence CFR 1.363).		•	(1) the names	g on the patent front page, list of up to 3 registered pater			
Address form PTO/SB/12	lence address (or Change of 22) attached.	Correspondence	or agents OR,	OR, alternatively, me of a single firm (having as a member a 2			
"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
3. ASSIGNEE NAME AND	RESIDENCE DATA TO B	E PRINTED ON	THE PATENT (p	rint or type)			
PLEASE NOTE: Unless recordation as set forth in	an assignee is identified be 37 CFR 3.11. Completion	elow, no assignee of this form is NO	data will appear T a substitute for	on the patent. If an assignfiling an assignment.	nee is identified below, the	document has been filed fo	
(A) NAME OF ASSIGN	EE	(E	B) RESIDENCE:	(CITY and STATE OR CO	UNTRY)		
				. D D.			
Please check the appropriate					orporation or other private gi	roup entity Governmen	
4a. The following fee(s) are enclosed: 4l ☐ Issue Fee			4b. Payment of Fee(s): A check in the amount of the fee(s) is enclosed.				
Publication Fee (No small entity discount permitted)			Payment by credit card. Form PTO-2038 is attached.				
Advance Order - # of Copies			The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
5. Change in Entity Status	(from status indicated above		b. Applicant	is no longer claiming SMA	LL ENTITY status. See 37 (CFR 1.27(g)(2)	
					ly paid issue fee to the applic istered attorney or agent; or t		
interest as shown by the reco	ords of the United States Pat	ent and Trademark	Office.	, u.ve		G F	
Authorized Signature				Date			

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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Registration No.

Typed or printed name _



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McLean, VA 2210			2821	
			DATE MAILED: 08/26/2004	4

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



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Notice of Fee Increase on October 1, 2004

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2004, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" because an increase in fees effective on October 1, 2004 is anticipated. See Revision of Patent Fees for Fiscal Year 2005; Proposed Rule, 69 Fed. Reg. 25861, 25863, 25864 (May 10, 2004).

The current fee schedule is accessible from WEB site (http://www.uspto.gov/main/howtofees.htm).

If the fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due" but not the correct amount in view of the fee increase, a "Notice of Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice of Pay Balance of Issue Fee," if the response to the Notice of Allowance is to be filed on or after October 1, 2004 (or mailed with a certificate of mailing on or after October 1, 2004), the issue fee paid should be the fee that is required at the time the fee is paid. See Manual of Patent Examining Procedure (MPEP), Section 1306 (Eighth Edition, Rev. 2, May 2004). If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously-paid issue fee should be paid. See MPEP Section 1308.01.

Effective October 1, 2004, 37 CFR 1.18 is proposed to be amended by revising paragraphs (a) through (c) to read as set forth below. As stated above, the final fee may be a different amount, and applicant should check the WEB site given above when paying the fee.

Section 1.18 Patent post allowance (including issue) fees.

(a) Issue fee for issuing each original or reissue patent, except a design or plant patent:

By a small entity (Sec. 1.27(a))	\$670.00
By other than a small entity	
(b) Issue fee for issuing a design patent:	·
By a small entity (Sec. 1.27(a))	\$245.00
By other than a small entity	
(c) Issue fee for issuing a plant patent:	
By a small entity (Sec. 1.27(a))	\$325.00
By other than a small entity	

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.